# U.S. Department of the Interior Bureau of Land Management

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January 30, 2015

2015 Missouri Breaks National Monument Project
(Cow Creek Airstrip Mechanized grading)





Figure 1 COVER PAGE PHOTO OF THE COW CREEK AIRSTRIP

U.S. Department of the Interior

Bureau of Land Management

Upper Missouri River Breaks National Monument

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### **Table of Contents**

CHA	APTER 1	3
INT	RODUCTION AND NEED FOR THE PROPOSED ACTION	3
Rec	lamation of the Cow Creek Airstrip	4
PUF	RPOSE AND NEED FOR THE PROPOSED ACTION	4
COI	NFORMANCE WITH BLM LAND USE PLAN(S)	4
REL	ATIONSHIPS TO STATUTES, REGULATIONS AND OTHER PLANS	5
IDE	NTIFICATION OF MANAGEMENT CONCERNS AND/OR ISSUES	6
CHA	APTER 2	8
DES	SCRIPTION OF ALTERNATIVES	8
	INTRODUCTION	8
1)	No Action	8
2)	Reclamation by heavy equipment	8
3)	Reclamation by light equipment and local fill dirt.	8
	No Action	8
	PROPOSED ACTION ALTERNATIVES	9
	Reclamation by heavy equipment:	9
	Reclamation by light equipment and local fill dirt:	12
REC	QUIRED DESIGN FEATURES:	13
CHA	APTER 3	14
AFF	ECTED ENVIRONMENT/ENVIRONMENTAL IMPACTS	14
	INTRODUCTION AND GENERAL SETTING	14

	RESOURCES PRESENT, BUT NOT AFFECTED TO A DEGREE THAT DETAILED ANALYSIS IS	
	REQUIRED	16
	RESOURCE A: Riparian-Wetland/Water Resources	17
	RESOURCE C: Cultural Resources and National Historic Trails	17
	ALTERNATIVE ONE: NO ACTION	17
	ALTERNATIVES 2 AND 3	17
	Direct and Indirect Impacts of these Alternatives	17
	Cumulative Impacts of these Alternatives	17
	RESOURCE D: Recreation, Visuals, and Wild and Scenic Rivers	18
RES	OURCES CARRIED FORWARD FOR ANALYSIS	18
	RESOURCE B: Rangeland Vegetation/Livestock Grazing Management	18
	NO ACTION	18
	ALTERNATIVE 1 – RECLAIMATION BY HEAVY EQUIPMENT	18
	Direct and Indirect Impacts of the Proposed Action	18
	ALTERNATIVE 2 – RECLAIMATION BY LIGHT EQUIPMENT AND LOCAL FILL	19
	Direct and Indirect Impacts of the Proposed Action	19
	RESOURCE E: Wildlife Habitat	19
	NO ACTION	20
	PROPOSED ACTION – Alternative 1, Heavy Equipment and Alternative 2, Light Equipment	nt
	and Fill:	20
	Direct and Indirect Impacts of the Proposed Action	22

	Cumulative Impacts of the Proposed Action	. 22
	·	
	RESOURCE F: Invasive Species	. 23
	ALTERNATIVE 1 – RECLAIMATION BY HEAVY EQUIPMENT	. 23
	Direct and Indirect Impacts of the Proposed Action	. 23
	ALTERNATIVE 2 – RECLAIMATION BY LIGHT EQUIPMENT AND LOCAL FILL	. 23
	Direct and Indirect Impacts of the Proposed Action	
	Direct and mairect impacts of the Proposed Action	. 24
CHAI	PTER 4	. 24
PERS	SONS, GROUPS, AND AGENCIES CONSULTED	. 24
	Table 4.1. List of Persons, Agencies and Organizations Consulted	. 24
Арре	endix A. Maps	. 26

### CHAPTER 1 INTRODUCTION AND NEED FOR THE PROPOSED ACTION

The Upper Missouri River Breaks National Monument (UMRBNM) represents a large area of land with many diverse landowners, administrative boundaries and geographical areas. Beginning at Fort Benton, the river corridor winds its way 149 miles to the eastern edge of the monument boundary marked by the James Kipp Recreation Area, where US Highway 191 crosses the Missouri River. Land ownership within the UMRBNM consists of BLM (374,724 acres), State of Montana (38,760 acres) and various private ownership (81,715 acres) involving four county governments, Chouteau, Blaine, Fergus, and Phillips. The monument designation also includes land in a 15 mile portion of Arrow Creek to its

confluence with the Missouri River.

Type of Action

### **Reclamation of the Cow Creek Airstrip**

#### PURPOSE AND NEED FOR THE PROPOSED ACTION

The purpose of this project is to reclaim approximately 1000 linear feet of soil disturbance along the Cow Creek Airstrip. The Cow Creek Airstrip was severely rutted during years of illegal trespass of vehicles driving the length of the airstrip. The immediate need is to reclaim the damage and smooth out the airstrip as it is currently unsafe to land an airplane with the existing ruts. In order to prevent future vehicle trespass there is an additional need to construct a short barricade fence. To mitigate the hazard to aircraft landing at the Cow Creek airstrip the proposed timeline for this project is summer of 2015. Fence-line construction would take place before September 2015 (before hunting season). The second purpose is to improve recreational access on public lands in the Upper Missouri River Breaks National Monument by signing closed routes as well as open routes within the Monument.

### CONFORMANCE WITH BLM LAND USE PLAN(S)

The proposed action is in conformance with the UMRBNM Resource Management Plan. As stated in the RMP on page 83 under Signing Roads and Aviation:

"Existing traffic control and directional signs will be maintained. New signs will be added where monitoring indicates a need to enhance safety or prevent resource damage or visitor confusion. Roads open to motorized and mechanized travel will be signed (small road number signs). Closed roads will not be signed unless necessary to prevent resource damage."

The UMRBNM Resource Management Plan also states "Six Airstrips (selected to avoid clusters) will remain open for private aircraft (planes, helicopter, hot air balloons, or ultralights) to provide opportunities for recreational backcountry activities such as camping, hiking, and sightseeing. The landing of aircraft will only be allowed on these airstrips. The six airstrips are Black Butte North, Bullwhacker, Cow Creek, Knox Ridge, Left Coulee, and Woodhawk."

On page 86 of the RMP under aviation maintenance of airstrips is specifically addressed:

"The BLM will allow minimal hand maintenance of airstrips without prior approval, but maintenance will be limited to the area previously disturbed. The emphasis will be to keep the airstrips as backcountry airstrips, only suitable for landing aircraft equipped to use primitive airstrips. Mechanized maintenance, improvements, facilities or infrastructure (tie downs, wind socks, airstrip delineators, etc.) will require prior approval by the authorized officer."

### RELATIONSHIPS TO STATUTES, REGULATIONS AND OTHER PLANS

This Environmental Assessment (EA) is tiered to the Upper Missouri River Breaks
Monument Resource Management Plan (RMP). The Monument RMP analyzed the
environmental consequences of Airstrips and specifically addresses maintenance of these
airstrips in the Monument. This action proposes an active restoration approach to
implementing RMP decisions and direction for maintenance of airstrips in the Monument.
The RMP is available for review at the Central Montana District Office in Lewistown,
Montana and at the Upper Missouri River Breaks Interpretive Center in Fort Benton,
Montana, as well as the Montana/Dakotas State Office in Billings, Montana. The
Monument RMP included a full public process and was coordinated with private
stakeholders and agencies that would be affected by management of backcountry airstrips
within the Monument.

The Upper Missouri National Wild and Scenic River Management Plan update, completed in 1993, also specifically supports the proposed action of signing roads closed when necessary to prevent resource damage with the following decision: "Existing trails and roads across the public lands leading into the corridor may be closed and rehabilitated, as shown in the ORV implementation plan." Note that the ORV implementation plan was revised through the RMP travel planning process.

### IDENTIFICATION OF MANAGEMENT CONCERNS AND/OR ISSUES

The following management concerns and/or issues were identified during internal scoping of the proposed projects.

### Recreation, Visuals, and Wild and Scenic Rivers

- The proposed projects are within The Upper Missouri River Breaks National Monument.
   How will the proposed projects affect the objects that the monument was created to protect?
- Recreationists may view the proposed projects as a serving an elite group of aviators and negative impact to their primitive recreation or a proactive approach to providing increased opportunities to the Recreation opportunity spectrum. What are the effects to recreation experiences?
- The proposed fence would add a linear structure to the landscape and may detract from the view.

#### Wildlife Habitat

Grassland habitat is important for numerous species of wildlife. Increasing recreational
use and disturbance in grassland habitats can displace wildlife and degrade habitat
quality. Proposed projects should be designed to minimize recreation use in existing
grassland habitats and limit disturbance of existing vegetation. What are the effects?

#### **Invasive Species**

Known weed infestations occur within the Upper Missouri corridor and the proposed project areas. The proposed projects should be designed to minimize the spread of

invasive plant species by mechanized equipment. What mitigations to the spread of noxious weeds are necessary?

## CHAPTER 2 DESCRIPTION OF ALTERNATIVES

#### INTRODUCTION

This EA focuses on three alternatives which include two alternatives of the proposed action and a no action alternative. The No Action it is considered and analyzed to provide a baseline for comparison of the impacts of the Proposed Action. The other action alternative that was considered but removed from detailed analysis would be to reclaim the damage to the Cow Creek airstrip by hand crews. While the RMP specifically states that: "The BLM will allow minimal hand maintenance of airstrips without prior approval," this alternative was removed from detailed analysis because of the lack of manpower as well as its efficiency. The proposed action to reclaim the ruts in the Airstrip by mechanized means would temporarily disturb the soils and vegetation. It also has the potential to disturb cultural sites. Therefore an EA is required to analyze and help mitigate the disturbance to objects in the Monument. The preliminary range of alternatives includes three alternatives:

- 1) No Action
- 2) Reclamation by heavy equipment
- 3) Reclamation by light equipment and local fill dirt.

### No Action

The BLM would not reclaim approximately 1000 linear feet of the Cow Creek Airstrip that where the resource damage occurred with mechanized equipment. The airstrip would remain in its current state, left to reclaim naturally, and remain a safety hazard to aircraft

and their crews. The BLM would also not sign, fence or barricade the airstrip leaving it susceptible to further damage by off road vehicle trespass.

### PROPOSED ACTION ALTERNATIVES

### **Reclamation by heavy equipment:**

The first alternative to meet the project need to reclaim approximately 1000 linear feet of ruts with various depths between 4 and 12 inches would be to utilize a road grader to run the length of the ruts within the Cow Creek Backcountry Airstrip. This method would be the quickest and would require the least amount of personnel, one equipment operator and one project lead, and could feasibly be accomplished in only a few hours. The grader would do two passes of the 1000 feet of rutted airstrip. This proposal would effectively smooth the ruts by filling them with existing soil. The road bed would then be reseeded with native grass seed and left to reclaim naturally. A linear barricade fence approximately 100 feet long and 4 feet high would be constructed using jack-leg post and pole installed at both end of the airstrip and signed 'road closed' to prevent further vehicle trespass to the airstrip.



Figure 2 Cow Creek Airstrip aerial view from the West 10/2005



Figure 3 Ruts in the airstrip inspected during the Site visit 3/2015. Note runoff in ruts.

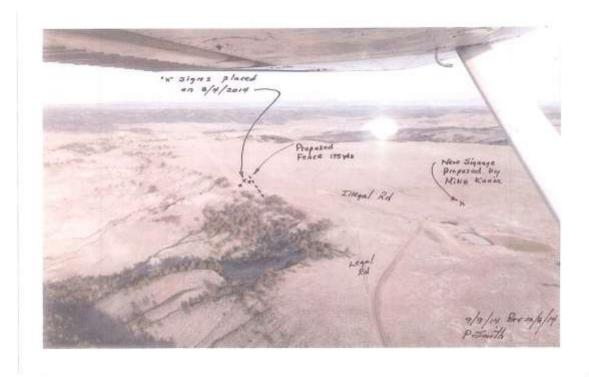


Figure 4 Aerial photograph of the Cow Creek Airstrip Proposed Improvements 9/2014



Figure 5 Location of proposed vehicle barrier fence location and parking looking from airstrip Reclamation by light equipment and local fill dirt:

The second proposed alternative to meet the project need to reclaim approximately 1000 linear feet of ruts with various depths between 4 and 12 inches would be to enlist the help of the Montana Backcountry Pilots Association to reclaim and close the Cow Creek Airstrip to vehicular travel. This proposed action would allow the Montana Backcountry Pilots Association to organize and execute this project that would meet the need for the reclamation as well as satisfy any mitigation required by the BLM. This proposal would allow the Montana Pilots Association to work with local land owners and the BLM to reclaim the damage to the Cow Creek Airstrip. This proposed action would utilize a tractor in conjunction with a pickup truck to fill the ruts with local weed free fill material. There is a source for fill just East of the airstrip which, if found to be weed free, could be an ideal source being that it is only a couple of hundred feet away. This action proposes that local fill from a suitable source be used to fill in the ruts by pushing it along with the tractor blade without digging into the surrounding vegetation. Once the ruts were sufficiently

filled, the tractor would make another pass over the area with a lawn roller or similar drag behind to compact the fill. The bare soil would then be seeded with native grass seed and be left to reclaim naturally. A linear vehicle barricade fence approximately would be constructed using jack-leg post and pole installed at both end of the airstrip and signed 'road closed' to prevent further vehicle trespass to the airstrip. The design of the barricade would be the minimum length necessary to deter a vehicle from driving onto the airstrip past the road closed sign. In addition to the road closed sign another sign could state that the Cow Creek Airstrip is maintained by the Montana Pilots Association and is limited to aviation use and authorized access only.



Figure 6 Photograph looking east of pilots enjoying the Cow Creek Airstrip 10/2005

- Wildlife fencing stipulations would include a smooth bottom wire that is at least 18" off the ground and a top wire maximum height of 40".
- To protect vegetation, project activities shall not be performed during periods when the soil is too wet to adequately support equipment/vehicles. If equipment/vehicles create ruts in excess of 3 inches deep, operations must cease as the soil will be deemed too wet to adequately support equipment/vehicles.
- All vehicles and equipment should be thoroughly cleaned to remove weed seed prior to entering the project site.
- Any fill dirt would be inspected by BLM weed specialist to verify weed seed free soils were being used.
- Prior to leaving the site, clothing and equipment should be inspected for weed seed (i.e. burs on clothing, downy/Japanese brome seed in socks). If found, the seeds should be removed, bagged and disposed of in a sanitary landfill.

# CHAPTER 3 AFFECTED ENVIRONMENT/ENVIRONMENTAL IMPACTS

### INTRODUCTION AND GENERAL SETTING

The proposed actions are located in the badlands of the Upper Missouri River Breaks

National Monument and the proposed project area is specific to the Cow Creek Airstrip

located at Township 25 North Range 21 East in Section 3. Notes found on the Recreational

Aviation Foundation's website state that:

"Cow Creek has the best location for pitching a tent. The ground has a good sod cover of gamma grass, making for a surface like a lawn. There are great views to the west with the Bear's Paw Mountains on the horizon. Take a hike to the east along the edge of the escarpment and search for the old plane wreckage down over the edge.

The badlands consist of patchy non continuous conifer forests, clusters of sagebrush, and adjacent grasslands. Native forest cover consists mostly of Ponderosa pine mixed with Douglas fir, lodge pole pine and Juniper. Mixed shrub communities are common in woody draws and flats throughout all of these vegetation types. The elevation of the Cow Creek Airstrip is at 3300 feet and the general climate in Central Montana has a steppe, semi-arid climate, with low precipitation that is to some extent countered by low evaporation rates. Typical precipitation is 10 to 20 inches, mostly in the form of snow, which can fall at any time of the year, and summer thunderstorms. Summers are short but hot and winters are long and cold, though some parts of Central Montana are moderated by the Chinook winds, causing 'warm' spells of 35-50F (2-10C) that can last from several days to 2–3 weeks.

The Cow Creek airstrip with the FAA identifier CW0 (Charlie-Whisky-Zero) was officially activated in September of 2010 however its historic use as an airstrip is evident by studying aerial photographs from 1956 which suggests that the Monument airstrips have been in existence for over 50 years. However, no specific data exists until after it was officially activated by the FAA in 2010. For the year ending 09-08-2011 the official operations report states that there were 80 aviation operations at the site. Specific uses of that total, 50 were identified as local (<20Miles) 20 were identified as non-local, and 10 were military operations. The physical description of surface of the CW0 is a 60 foot wide by 2200 feet long unimproved remote airstrip composed of grass/sod in poor condition with a rough surface, high vegetation, and deep vehicle ruts on the South half of the runway. Provided in Appendix A is a VFR aviation map that includes all six of the Monuments airstrips as well as a Monument map showing all roads leading to the airstrip.

Critical Elements are resources that BLM has determined should be addressed in every environmental document. Including this table at the beginning of Chapter 3 allows Critical Elements that are "not present" or "not affected" to be dismissed (with rationale), so that the rest of the Affected Environment (and the Impacts section) can focus on resources that are truly relevant to the project at hand

	CRITICAL ELEMENTS	
Determination*	Resource	Rationale for Determination
NI	Air Quality	Air quality in the project area is excellent and unlikely to be affected by the proposed action.
NI	Areas of Critical Environmental Concern	None Present
PI	Cultural Resources	Discussed under Resource C – Cultural Resources and National Historic Trails
NP	Environmental Justice	None Present
NP	Farmlands (Prime or Unique)	None Present
NP	Floodplains	None Present
PI	Invasive, Non-native Species	Discussed under Resource F – Invasive Species
NP	Native American Religious Concerns	None Present
PI	Threatened, Endangered or Candidate Plant or Animal Species	Discussed under Resource E – Wildlife Habitat and T&E Species
NI	Visual Resources	Visual Resources in the project area would not be affected since the area is located at the top of a ridge and is unlikely to be seen from anywhere except when approaching the airstrip from the open route.
NP	Wastes (hazardous or solid)	None Present
NP	Water Quality (drinking/ground)	None Present
NP	Wetlands/Riparian Zones	None Present
NP	Wild and Scenic Rivers	None Present
NP	Wilderness	None Present

# RESOURCES PRESENT, BUT NOT AFFECTED TO A DEGREE THAT DETAILED ANALYSIS IS REQUIRED

**RESOURCE A: Riparian-Wetland/Water Resources** 

**RESOURCE C: Cultural Resources and National Historic Trails** 

In 2010 the BLM completed a Class III (intensive) cultural resource inventory of the Cow

Creek Airstrip as part of the Raintrap Prescribed Burn (11-MT-070-001). That inventory

examined not only the area within the airstrip but also the surrounding landscape for

evidence of historic and prehistoric remains. That report, which is on file at the BLM office

in Lewistown, provides a comprehensive historic and prehistoric overview of cultures and

resources in the project area. As a result of that inventory, no historic properties were

documented in the area of potential effects (APE).

The APE associated with this proposal is 1.5 miles from the Nez Perce National Historic

Trail's centerline, and visibly unnoticeable from the trail due to its placement on the

landscape. The APE is located more than ten miles from the Lewis & Clark National Historic

Trail's centerline.

ALTERNATIVE ONE: NO ACTION

No historic properties would be affected by selecting and implementing this alternative.

**ALTERNATIVES 2 AND 3** 

**Direct and Indirect Impacts of these Alternatives** 

No historic properties would be affected by selecting and implementing this alternative.

**Cumulative Impacts of these Alternatives** 

17

Based on the anecdotal reports that this airstrip is over fifty years old, continued use of the airstrip would maintain a historic use in the Missouri River Breaks.

RESOURCE D: Recreation, Visuals, and Wild and Scenic Rivers

RESOURCES CARRIED FORWARD FOR ANALYSIS

**RESOURCE B: Rangeland Vegetation/Livestock Grazing Management** 

Vegetation within the project area is dominated by western wheatgrass and other native upland species. The shrub component of the plant community was originally removed through mechanical means and more recently through maintenance by the Montana Pilots Association through the use of hand tools. Surrounding the runway is a grass-shrub community dominated by Wyoming big sagebrush.

NO ACTION

This alternative would have no impact on upland vegetation or livestock grazing.

ALTERNATIVE 1 – RECLAIMATION BY HEAVY EQUIPMENT

**Direct and Indirect Impacts of the Proposed Action** 

Using heavy equipment to smooth the runway would remove a large amount of vegetation from the runway. Because there is no excess soil to fill the existing ruts, the entire airstrip surface would need to be lowered to create a level landing surface. The lowering of the surface would lead to additional water accumulation on the runway and exacerbate problems with soft landing surfaces and erosion. Exposed soil would potentially revegetate with non-native species such as annual bromes unless seeded with native species.

18

### ALTERNATIVE 2 – RECLAIMATION BY LIGHT EQUIPMENT AND LOCAL FILL

#### **Direct and Indirect Impacts of the Proposed Action**

This alternative would address the hazard to aircraft while removing almost no vegetation from the runway surface. Reseeding the repaired areas as soon as practicable (fall after repair) would establish native vegetation quickly and reduce the risk of invasion from non-native species such as cheatgrass or Japanese brome. Establishing vegetation quickly will also reduce runoff and stabilize the soil.

#### **RESOURCE E: Wildlife Habitat**

Wildlife - General: Wildlife species within the project area include species typically associated with central Montana and the Missouri River Breaks habitat. Mule deer, elk, pronghorn, bighorn sheep, raptors, furbearers, reptiles and amphibians are common throughout the analysis area. The project area is within identified elk, pronghorn, bighorn sheep, and mule deer year round range. For a complete listing of species which could occur within the project area, see Upper Missouri River Breaks National Monument (UMRBNM) Resource Management Plan (RMP) (December 2008).

Threatened, Endangered and Species Proposed for Listing: There are no other threatened, endangered or wildlife species proposed for listing present in the area of the proposed action. There is no designated critical habitat for any species within the project area.

Designated Sensitive Species: The project is located at edge of sagebrush grassland habitat and greater sage grouse utilize the area. A breeding lek is less than 3 miles from the project area, and habitat improvements for sage grouse have occurred less than one mile from project site. Townsend's big-eared bat, long-eared myotis, long-legged myotis, and fringed myotis have habitat and could occur within available habitat in and adjacent to the proposed projects; however, there are no documented roosting sites within the project areas. Bald and golden eagles are documented seasonally migrating or occasionally utilizing the area. There are no known nests documented. The greater short-horned lizard occupies open sagebrush grassland habitat and badland habitat and is present within the

project area. Most BLM Designated Sensitive Species(IM No. MT-2014-067) have no suitable habitat within the project area or will not be affected by the proposed action.

*Migratory Birds:* The Migratory Bird Treaty Act (16 USC 703-711) protects all migratory birds including those listed as BLM Sensitive Species. The sagebrush/grassland and ponderosa pine/Douglas-fir habitat types occur within the project area. The species present are those common to these habitat types within north central Montana. This project may have impact on ground nesting species, if work is done before completion of nesting.

*Fisheries:* There are no fisheries in or near the project area. No fish species will be affected by any of the alternatives.

#### NO ACTION

Failing to repair airstrip may reduce use and eventually stop use by aircraft. While very limited use occurs and no impacts to wildlife have been documented, abandonment of this airstrip could have long term benefits to areas wildlife, notably sage grouse. Reclamation of the airstrip would return sagebrush to area which is kept cleared for aircraft safety. The potential for airstrip use during sage grouse breeding and nesting would be removed, along with any future maintenance activity, which would reduce potential disturbance. The ongoing impacts currently occurring will continue under no action. Current impacts to wildlife are minimal and cannot be quantified.

## PROPOSED ACTION – Alternative 1, Heavy Equipment and Alternative 2, Light Equipment and Fill:

Impacts from these two alternatives will increase as the number and size of vehicles/equipment increases within the project area, and the amount of physical disturbance required.

Wildlife - General: Any rehabilitation activity during spring and early summer may cause disturbance to nesting birds associated with sagebrush/grassland habitat or adjacent ponderosa pine. Avoidance of nesting season could limit this impact, but some disturbance of wildlife and mortality of small reptiles or rodents could occur during summer months.

Other than Sensitive Species below, these impacts would be very minor and would not affect any populations either regionally or locally.

Threatened, Endangered and Species Proposed for Listing: There are no other threatened, endangered or wildlife species proposed for listing present in the area of the proposed action. There is no designated critical habitat for any other species within the project area.

Designated Sensitive Species: The greater short-horned lizard occupies open sagebrush grassland habitat and badland habitat and is present within the project area. The greater short-horned lizard may be affected by the proposed action, through direct mortality. This species prefers very short, sparse, and open vegetation, and makes active use of bare ground for easier movement while looking for its prey. It is very common to see this species killed on 2 track roads, and will likely be present along or in the airstrip where equipment and vehicles will be driving. Population levels of this species are unknown, but they are widely distributed throughout the Missouri River Breaks and any impacts should only affect the local population if at all.

This project occurs within three miles of a known greater sage grouse breeding lek, and is likely utilized seasonally for nesting and feeding. Any disturbance of this species during breeding or nesting could impact breeding/nesting success, and could cause mortality of young chicks until they become more mobile. Construction activity could disturb sage grouse during any season, but spring and early summer are most critical.

Most BLM Designated Sensitive Species(IM No. MT-2014-067) have no suitable habitat within the project area or will not be affected by the proposed action.

Migratory Birds: Any rehabilitation activity during spring and early summer may cause disturbance to nesting birds associated with sagebrush/grassland habitat or adjacent ponderosa pine. Avoidance of nesting season could limit this impact, but some disturbance could occur during summer months. These impacts would be very minor and would not affect any populations either regionally or locally.

*Fisheries:* No fish species will be affected by any of the alternatives.

### **Direct and Indirect Impacts of the Proposed Action**

Direct impacts to any species would be mortality or disturbance, caused by vehicles and equipment doing rehabilitation. Short-horned lizard would be most impacted by summer landing of aircraft, which could cause direct mortality. Other than impacts to Greater sage grouse and greater short-horned lizard, these impacts would be negligible for populations within the area. Indirect impacts would be potential increased use of airstrip during any season. Any increase of low flying aircraft or land on the airstrip has potential to increase impacts to resident species. Ground nesting birds would most likely be impacted in the spring and early summer. Big game species could be harassed by low flying or landing aircraft during any season, but these impacts will be greatest during fall hunting season. Fly-in hunters will often do low level scouting flights and will know direction to hunt the licensed species upon landing. This could increase harvest in the area.

### **Cumulative Impacts of the Proposed Action**

Region-wide and on a landscape-scale, the alteration of sagebrush ecosystems and habitat fragmentation has occurred from conversion to cultivated crops, the conservation reserve program (CRP), road construction, oil and gas production, and other construction activities. The loss or alteration of sagebrush ecosystems has led to declines in species diversity, provides opportunities for invasive species to establish, and fragments quality habitat for all wildlife species. Over the long term, changes in plant community composition has occurred from grazing and browsing by livestock and wildlife, wildfire, suppression of wildfire, increase in recreation use, and noxious weeds. Impacts can vary depending on the degree of habitat change and the requirements of each wildlife species. These changes and activities have occurred on public, private, and state land and have resulted in habitat loss for some species. The result is fragmented habitat, the creation of smaller islands of habitat, and isolated blocks of public land that are surrounded by extensive areas of agricultural lands. Expansion of roads for grazing management, recreation and during gas development, and the noise and disturbance associated with maintenance activities, have disrupted wildlife populations. This airstrip and its continued used would be treated as an additional road when summarizing impacts. While use may be less, the sagebrush is

cleared on both sides altering the habitat, and the low level flight and loud aircraft are a greater impact to some species.

### **RESOURCE F: Invasive Species**

There are no known state listed noxious weeds at the site of the proposed action. However, annual brome species (downy, Japanese) are present in the area as well as yellow sweet clover.

### NO ACTION

The disturbance would be limited to the ruts that have already occurred. The area may reclaim naturally or the ruts may persist due to water drainage based on precipitation and melting. These areas would be susceptible to colonizing weed species that would provide a starting point for future encroachment into the undisturbed sage brush community.

### **ALTERNATIVE 1 - RECLAIMATION BY HEAVY EQUIPMENT**

#### Direct and Indirect Impacts of the Proposed Action

This alternative creates a 1000' x 2 blade widths disturbance in an area adjacent to important sage brush habitat. The removal of the natural vegetation will create an open space that will likely be colonized by undesired plant species such as annual bromes, yellow sweet clover, kochia, Russian thistle, annual mustards, etc. It is unknown to what extent that this would occur, but these species would likely be in direct competition with seeded species and could contribute to seeding failure. In addition, these undesired plants would possibly have a starting point for future encroachment into the undisturbed sage brush community. The airstrip would also require future management to knock down tall vegetation to remove hazards for landing aircraft and reduce the potential for fire.

Restriction of vehicle access due to the installation of a fence would limit potential seed dispersal to the road and parking area.

### ALTERNATIVE 2 – RECLAIMATION BY LIGHT EQUIPMENT AND LOCAL FILL

### Direct and Indirect Impacts of the Proposed Action

The filled ruts would most likely be susceptible to the same concerns outlined in the previous alternative. However, this would be a much smaller area than that of the bladed area in that alternative. Established plants that may be buried should be able to recover and grow through the soil and provide competition for colonizing weedy species. Some future management may also be required to knock down tall vegetation to remove hazards for landing aircraft and reduce the potential for fire.

Restriction of vehicle access due to the installation of a fence would limit potential seed dispersal to the road and parking area.

# CHAPTER 4 PERSONS, GROUPS, AND AGENCIES CONSULTED

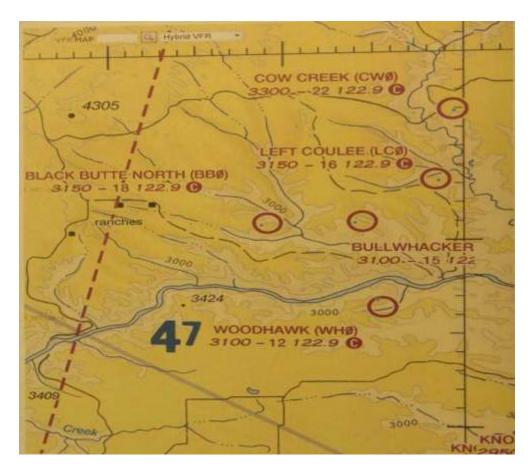
During preparation of the EA, the public was notified of the proposed action through a posting on the Lewistown Field Office NEPA Register on 4/01/2015. A 30 day public comment period offered because of the Wildlife, Range, and Invasive Species concerns in the proposed area have been expressed.

Table 4.1. List of Persons, Agencies and Organizations Consulted

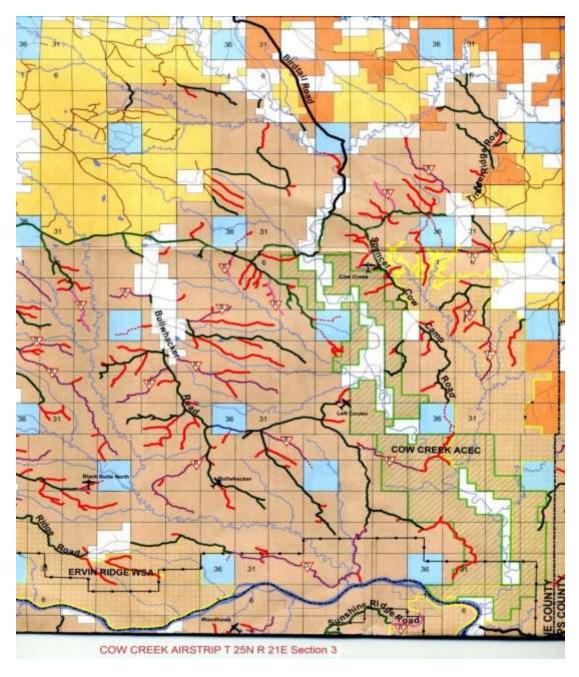
Name (and agency, if other than BLM)	Title	Responsible for the Following Section(s) of this  Document
Brian Woolf	Dark Bangar	Project Lead/NEPA Preparer/VRM
Brian Woon	Park Ranger	Project Lead/NEPA Preparer/VKWI
Ben Hileman	Rangeland	Upland Vegetation and Livestock Grazing
	Management Specialist	Management
Mark Schaefer	Outdoor Recreation	Recreation, Visual Resource Management, Wild
	Planner	and Scenic Rivers
Zane Fulbright	Archeologist	Cultural Resources, National Historic Trails
Chad Krause	Hydrologist	Riparian-wetland/Water Resources
Jody Peters	Wildlife Biologist	Wildlife Habitat

Name (and agency, if other than BLM)	Title	Responsible for the Following Section(s) of this Document
Kenny Keever	Natural Resource Specialist – Weeds	Invasive Species

### Appendix A. Maps



Map 1 Monument Airstrips and their FAA Identifiers



Map 2 showing location of Cow Creek Airstrip location T25N R21E Section 3